



**UNITED STATES MARINE CORPS**  
MARINE AIR GROUND TASK FORCE TRAINING COMMAND  
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CCO 8027.1  
3-60  
27 Sep 02

COMBAT CENTER ORDER 8027.1

From: Commanding General  
To: Distribution List

Subj: STANDARD OPERATING PROCEDURE (SOP) FOR NONEMERGENCY EXPLOSIVE ORDNANCE DISPOSAL (EOD) OPERATIONS

Ref: (a) NAVSEA 8023.11  
(b) NAVSEA OP 5, Vol 1

Encl: (1) Record of Approval  
(2) Supervisor/Worker's Certification  
(3) EOD Operation Order  
(4) EOD Disassembly and Inerting Procedures Worksheet  
(5) EOD Training Lesson Plan

1. Situation. To provide a generic SOP which satisfies the requirements of references (a) and (b) for nonemergency EOD operations to include the destruction and demilitarization of explosive ordnance and training with explosive ordnance.

2. Mission

a. Reference (a) requires a specific SOP for each nonemergency explosive operation but allows latitude in both format and content to conform with individual activity conditions.

b. The development and submission of an SOP for review and signature by the Commanding General for each and every EOD nonemergency explosive operation is impractical and would severely impede the accomplishment of the EOD mission. Therefore, this Order provides an overview of the information which must be in an SOP and where that information will be found for each nonemergency explosive operation performed by the Combat Center EOD Unit or other EOD teams operating on ranges or in training areas aboard the Combat Center.

c. This Order authorizes the use of EOD Letters of Instruction (LOI), together with an EOD Operation Order, to serve as an SOP for each nonemergency explosive operation involving Range Clearance Operations and other nonemergency explosive operations. This Order further authorizes the use of EOD LOIs, together with EOD Disassembly and Inerting Procedures, to serve as an SOP for each nonemergency explosive operation involving the disassembly and inerting of explosive ordnance; and it allows the use of EOD LOIs, together with EOD Lesson Plans to serve as an SOP for each nonemergency explosive operation involving EOD training.

3. Execution. Reference (a) requires that nine specific areas be addressed in an SOP for each nonemergency explosive operation. These areas are:

a. Record of Approval. A record of the personnel who have developed and reviewed this SOP. By this Order, the EOD officer is directed to review this SOP annually and submit any required changes as necessary. Enclosure (1) provides this record.

b. Supervisor's Statement. Any person who is designated as a supervisor of a nonemergency explosive operation must understand his duties as they pertain to this SOP. All assigned supervisors must read and understand this SOP, all EOD LOIs, particularly those involving safety, range clearance operations, and disassembly and inerting; and certify this understanding by signing enclosure (2).

c. Worker's Statement. Each person who is assigned to a nonemergency explosive operation must understand his duties as they pertain to this SOP, and must have received a hazard control briefing. By this Order, the EOD LOI on Safety will constitute the hazard control briefing. All assigned workers must read and understand this SOP, all EOD LOIs with particular attention to the ones on safety, range clearance operations, and disassembly and inerting; and certify this understanding by signing enclosure (2).

d. Step-by-Step Procedures. These procedures provide clear and concise step-by-step instructions for performing nonexplosive operations. By this Order, enclosure (3), the EOD Operation Order, constitutes the step by step procedures for range clearance operations and those nonemergency explosive operations not delineated otherwise in this Order. Enclosure (4), the EOD Disassembly and Inerting Procedures format, constitutes the step by step procedures for disassembly and inerting operations, and enclosure (5), EOD Lesson Plans, constitutes the step by step procedures for EOD training.

e. Diagrams

(1) Buildings or Site Diagram. As required, this diagram depicts the location of any nonemergency explosive operation. If applicable, it will include safety-related items such as fire extinguishers, first aid kits, etc.

(2) Processing Diagram. As required, this diagram depicts any information that clarifies or amplifies the step-by-step procedures.

(3) By this Order, a diagram will be appended to enclosure (3). This will constitute the required diagram for range clearance operations or other nonemergency explosive operations not delineated otherwise in this order. Enclosures (4) and (5) will append diagrams as necessary to conform with reference (a).

f. Equipment Lists

(1) Processing Equipment List. As required, this list will include all tools, equipment, and supplies, necessary to carry out any nonemergency explosive operation.

(2) Safety Equipment List. As required, this list will include all safety equipment necessary for the safety of personnel, equipment, facilities, and the environment.

(3) By this Order, the equipment list of enclosure (3) constitutes the Equipment List for both operations and safety during range clearance operations and other nonexplosive operations not delineated otherwise in this Order. Enclosure (4) provides space within the body of the format for such lists, and as necessary, such lists will be appended to enclosure (5).

g. Hazards, Hazards Control and Hazards Control Briefings

(1) While reference (a) requires all hazards and hazard control methods applicable to a process be listed in an SOP, it is impractical to do so for EOD operations. EOD operations are not specific processes conducted within facilities, but are methods used to reduce the hazards associated with hundreds of different ordnance items. The hazards and safety precautions for hundreds of ordnance items are too numerous to annotate individually in this Order. They are covered individually in Navy Explosive Ordnance Disposal Bulletins (NAV EODBs) and EOD personnel are trained on these while attending the Basic EOD Course. This meets the requirement of the Type I Hazard Control Briefing.

(2) There are general hazards and safety precautions which can be observed and these are addressed in the EOD LOI on Safety. By this Order, reading the EOD LOI on Safety, attending the Pre-Operations Brief for each type of nonemergency explosive operation, and completing an ORM worksheet, EOD personnel meet the requirement for the Type II Hazard Control Briefing described in reference (a).

#### h. Emergency Response and Contingency Plans

(1) By this Order, the information provided in the EOD LOI on Safety and in enclosure (3) provides the necessary information for range clearance operations and those nonemergency explosive operations not otherwise delineated in this Order.

(2) By this Order, the information provided in the EOD LOI on Safety, the EOD LOI on Disassembly and Inerting, and Enclosure (5), provides the necessary information for disassembly and inerting operations.

(3) Enclosure (5) will provide as necessary, in addition to the EOD LOI on Safety, any additional emergency response and contingency plans, that may be required for each particular training evolution.

i. Security. This section provides information on the requirements for maintaining physical security, accountability, and disposition of explosives and ordnance items. By this Order, the EOD Class V (W) Desktop procedures, the EOD LOI on Range Clearance Operations, the EOD LOI on Disassembly and Inerting, and enclosures (3) and (4) provide this information.

j. Action. All EOD personnel participating in nonemergency explosive operations will ensure that they have read the EOD LOIs, as well as read and signed the applicable enclosures to this Order. When nonemergency explosive operations take place, the EOD officer will ensure that enclosure (3), (4), or (5) is used and briefed to all participating personnel prior to the commencement of operations. The EOD officer will conduct an annual review of this SOP and EOD LOIs. There will be no deviation from the prescribed procedures except in the interest of safety, as determined by the senior EOD officer/technician on site.

k. Applicability. EOD Officers and EOD technicians will be guided in all matters pertaining to nonemergency explosive operations by the policy/procedures set forth in this order and references (a) and (b). This order is applicable to the Combat Center EOD unit, or any EOD team participating in nonemergency explosive operations involving:

(1) Range clearance operations.

(2) Training involving explosives or explosive actuated devices.

(3) Disassembly and inerting of explosive ordnance items.

m. Location. A copy of this SOP will be retained in the Combat Center EOD Unit, as well as be provided to each EOD team performing nonemergency explosive operations.

n. Validation. Procedures contained or referred to by the references listed in this order, have been validated using both inert and service (live) Class V (A) and Class V (W) material.

4. Administration and Logistics. Distribution Statement A-1 directives issued by the Commanding General are distributed via e-mail. This Order can be viewed at <http://www.29palms.usmc.mil/dirs/manpower/adj>.

5. Command and Signal

a. Signal. This Order is effective the date signed.

b. Command. This Order is applicable to the Marine Corps Total Force.

  
J. D. NICHOLS  
Chief of Staff

DISTRIBUTION: A-1

## RECORD OF APPROVAL

Following reference (a) and (b), this Standard Operating Procedure (SOP) involving nonemergency explosive ordnance disposal operations is approved by the following authority.

\_\_\_\_\_  
J. D. NICHOLS  
Chief of Staff

\_\_\_\_\_  
Date

## CERTIFICATION OF ANNUAL REVIEW

Following reference (b) and local directives, an annual review is required of all SOPs. If no major changes are required, the review is sufficient at the EOD unit level. If a major change is required, the SOP must be submitted to the approval authority.

_____ Printed Name and Grade	_____ Signature	_____ Date
_____ Printed Name and Grade	_____ Signature	_____ Date
_____ Printed Name and Grade	_____ Signature	_____ Date
_____ Printed Name and Grade	_____ Signature	_____ Date

The SOP Record of Approval expires 4 years from the date of approval and requires review by all activities involved in the development of the SOP one year from the last date of annual review.

## CHANGE PROCEDURES

Any changes made to the operational procedures of this SOP are considered major changes and require review by all activities involved in the development of the SOP. Changes such as phone numbers, correction of typographical errors, or rewording of paragraphs (to clarify meaning or intent) that do not affect the content of the procedures delineated in this SOP do not require recertification.

ENCLOSURE (1)

# NON-EMERGENCY EXPLOSIVE OPERATIONS SUPERVISOR'S CERTIFICATION

[illegible]



## EOD Operation Order

save op order

new order

# UNCLASSIFIED EOD MATRIX ORDER

UNIT: MCAGCC EOD

xx-00

23-Aug-02

**1. GENERAL SITUATION:****ATTACHMENTS and DETACHMENTS:****2. MISSION:****3. EXECUTION:****CONCEPT OF OPERATIONS:**

1. This will be a dismounted sweep. vehicle sweep. vehicle and dismounted sweep.
2. The operation will be conducted on
3. The starting point will be grid xxxx and we will work our way
4. Main MSR's will be cleared of UXO's and ordnance while enroute to the RTA.

**TASKS:****UNIT****Officer in Charge  
(OIC)**

1. Overall responsibility for the operation.

**Range Safety  
Officer (RSO)**

name

1. Responsible for ensuring that the operation is carried out in the safest manner possible.
2. The RSO has the overall responsibility of all Class V(W).
3. Conduct the operation.
4. Confirm that the RTA is approved.
5. Contact BEARMAT prior to departure, informing them of the intended operation and remind them that no one is to enter the scheduled RTA without prior coordination with the EOD Operations Chief.
6. Notify Range Control (BEARMAT) of the location of all personnel during this operation. 6623 for phone, VHF 49.85 or channel 12 on the Sabers.
7. Ensure radio checks with BEARMAT are conducted.
8. Inventory the Class V(W) upon arrival and prior to departure of the RTA.
9. Supervise the distribution of the Class V(W).

**Logistics NCO**  
name

1. Ensure all tools and equipment (per the Motor Transport SOP) are operationally checked and staged. Each day, he will ensure that all tools and equipment are loaded on the vehicles.

**Motor Transport  
NCO**  
name

1. Coordinate all Motor Transport support necessary for this operation.
2. Ensure that all vehicles for this operation are properly dispatched and the operators complete their operational check.
3. Daily issue out the hand held radios and account for them upon return.
4. At the end of the day, provide the RSO with a mileage report for each day.

**Class V(W) NCO**  
name

1. Ensure the amounts of Class V(W) are properly drawn, transported, and accounted for during the operation.
2. Give an account of the Class V(W) used to the RSO at the end of each day.

**Corpsman**  
name

1. Provide routine and emergency medical care, as needed during this operation.
2. Ensure Unit 5 and Medical box are complete and serviceable.
3. Be familiar with MEDEVAC procedures as listed in CCO P3500.4F.
4. Be prepared to treat mass injuries.

UNCLASSIFIED

ENCLOSURE (3)



# UNCLASSIFIED

## EOD MATRIX ORDER

UNIT: MCAGCC EOD

xx-00

23-Aug-02

### COORDINATING INSTRUCTIONS:

#### Timeline:

DATE	TIME	Pre-Operation Brief	All Hands	RSO	Bldg 1306
DATE	TIME	Muster	All Hands	OIC/RSO	Bldg 1306
DATE	TIME	Depart for FASP	Class V(W)	RSO	Bldg 1306
DATE	TIME	Convoy departs for RTA	All Hands	RSO	Bldg 1306

Daily routine will begin and end at

All remaining personnel will assist the logistics NCO in loading the vehicles.

Vehicle operators will ensure pre-op checks are complete.

Upon arrival at the RTA, communication with BEARMAT will be made and road signs will be placed in an effort to prevent unauthorized entry during the operation.

A morning safety brief will be given prior to daily operations.

#### Safety:

1. Enclosure (1) is the daily safety brief.
2. In the event of an accident:
  - (a) All EOD operations will cease.
  - (b) The accident site will not be disturbed
  - (c) The corpsman will be responsible for all medical related problems and will determine if a MEDEVAC is required.
  - (d) Priority will be directed to evacuation of injured personnel.
3. Range operations will cease anytime positive communications are lost with BEARMAT and will not resume until positive communications have been reestablished.
4. If anyone observes an unauthorized intrusion of the RTA, that person will immediately sound a voice alarm and cease all EOD operations. If required, red smoke can be used to warn intruders away from EOD operations. Notify BEARMAT in the event of unauthorized civilian intrusion in the RTA. Remain in cease fire condition until notified by BEARMAT to continue operations.

### ADMINISTRATION & LOGISTICS:

#### Administration:

1. The corpsman will maintain and provide to the RSO a roster of all personnel participating. The roster will include each person's name, grade, unit, SSN#, blood type and next of kin information.
2. The uniform for this operation is the utility uniform.
3. The training SNCO is responsible for ensuring all appropriate information is entered into the Individual Training Records.

#### Logistics:

1. Supplies/Equipment required for this operation
  - a. Flags (15 per vehicle)
  - b. Water coolers (1 per vehicle)
  - c. Long handle shovel (1 per vehicle)
2. Motor transport equipment required
  - a. Tire repair kit (RSO vehicle)
  - b. Spare tire (1 per vehicle)
  - c. Lug wrench (1 per vehicle)
  - d. Tow harness (1 per vehicle)
  - e. Tow chain (1 per vehicle)
  - f. Map (1 per vehicle)
  - g. Fire extinguishers (1 per vehicle)
  - h. M101 trailer (as req)
  - i. Road signs (two sets)
3. Communications equipment required for this operation
  - a. Singar radio (1 per vehicle)
  - b. Spectra radio (1 per vehicle)
  - c. RSO Box/cell phone(1 per vehicle)
  - d. Saber hand held radio (1 per vehicle)
  - e. Extra saber batter (1 per vehicle)
  - f. SAT phone (RSO vehicle)

ENCLOSURE (3)

UNCLASSIFIED

# UNCLASSIFIED

## EOD MATRIX ORDER

UNIT: MCAGCC EOD

xx-00

23-Aug-02

### ADMINISTRATION & LOGISTICS:

#### Logistics:

4. Class V(W) required for this operation
  - a. smoke/flare box (class v vehicle)

#### Class V(W)

a. Time Fuse (M670):	C-4 (M023):	e
b. Ignitors (M766):	Det Cord (M456):	x
c. Non electric cap (M131):		t
d. Electric caps (M130):		r
		a

### COMMAND & SIGNAL:

#### Command:

1. The RSO will be located where he can best control and observe the activities.
2. The Corpsman will be located with the safety vehicle at a safe distance and will not participate in EOD procedures.

#### Signal:

1. Internal control net is the EOD CONV channel on the spectra radio, or 41.000 on the AN/VRC-90.
2. Call signs will be rank and last name, this is not a tactical net.
3. Call sign for this operation is EOD Frequency for contacting BEARMAT is 49.85 or channel 12 on the Spectra.
4. Any color other than red smoke will be used for marking a LZ in the event a MEDEVAC is required.

#### Changes:

1. Any changes made to this order (SOP) are considered major changes and require reviews by all elements involved in the development of the SOP. Changes such as phone numbers, corrections of typographical errors, or just rewording of paragraphs (to clarify meaning or intent) that do not affect the content of the procedures delineated in this SOP do not require recertification.

To Comply with NAVSEA 8023.11, the following information is provided:

- a. Record of approval. CCO P8027.2 authorizes the use of LOI's. LOI 13 directs the use of this order format for EOD operations.
- b. Step by step procedures. Step by step procedures are covered by this order.
- c. Site diagram. Included in this order
- d. Equipment list. See Logistics.
- e. Hazards, hazard control, hazard control briefing. The schooling received by the personnel involved, as well as the information listed in this order provide this information.
- f. Emergency response and contingency plans. The safety portion of the order and LOI 4 contain the emergency response and contingency plans.

This order was drafted by: on

This order was reviewed on

This order was approved on

USMC, EOD OIC

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ENCLOSURE (3)

# UNCLASSIFIED

## EOD MATRIX ORDER

UNIT: MCAGCC EOD

xx-00

23-Aug-02

### DAILY SAFETY BRIEF

1. Discuss ordnance items that could be encountered during this range sweep.
2. Dress appropriately.
3. Drink plenty of water.
4. No smoking within 50 ft of any explosive.
5. Blasting caps will be kept in the cap box until ready for use.
6. Smoke and flare box is fully stocked with any color other than red smoke for MEDEVAC.
7. No deviation from EODB 60 series procedures is permitted.
8. All RSP's will have prior approval by the OIC. RSP's are limited to procedures that do not come in contact with the ordnance item.
9. Shots or procedures will only be initiated under the authorization of the RSO.
10. A 60 minute wait time will be observed for all non-electrical misfires.
11. A smoldering shot will not be approached, but will be monitored from a safe distance. The RSO will determine when it is safe to return down range.
12. If a safety violation is observed, call a cease fire immediately.
13. Be safety conscious at all times.

ENCLOSURE (3)

UNCLASSIFIED

FOR OFFICIAL USE ONLY

EXPLOSIVE ORDNANCE DISPOSAL  
DISASSEMBLY AND INERTING PROCEDURES  
FOR THE

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REVIEWED/APPROVED BY: \_\_\_\_\_

REVIEWED/APPROVED BY: \_\_\_\_\_

REVIEWED/APPROVED BY: \_\_\_\_\_

REVIEWED/APPROVED BY: \_\_\_\_\_

REVIEWED/APPROVED BY: \_\_\_\_\_

NOTE: THESE DISASSEMBLY AND INERTING PROCEDURES ARE TO BE USED AS A GUIDE AND MAY BE DEVIATED FROM AS THE SITUATION MAY DICTATE DUE TO MODIFICATION/DISSIMILARITIES IN THE ORDNANCE. DUE TO THE INHERENTLY DANGEROUS NATURE OF DISASSEMBLY/INERTING, THERE ARE NO GUARANTEES THAT AN ACCIDENT/DETONATION WILL NOT OCCUR. THESE PROCEDURES ARE WRITTEN TO ACCOMPLISH THE MISSION IN AS SAFE A MANNER AS POSSIBLE WITH THE INFORMATION ON HAND AT THE TIME. BEFORE ANY DISASSEMBLY/INERTING OPERATION BEGINS, IT IS THE INDIVIDUAL EOD TECHNICIAN'S RESPONSIBILITY TO RESEARCH THE ORDNANCE ITEM TO BE DISASSEMBLED/INERTED AS THOROUGHLY AS POSSIBLE.

ENCLOSURE (4)

1. SAFETY/WARNINGS AND HAZARDOUS COMPONENTS

A. SAFETY

- (1) CORPSMAN
- (2) COMMUNICATIONS
- (3) SAFETY VEHICLE(S)

B. WARNINGS

C. HAZARDOUS COMPONENTS

2. IDENTIFICATION, DESCRIPTION, REFERENCES, TOOLS/EQUIPMENT AND PROTECTIVE EQUIPMENT

A. IDENTIFICATION

- (1) TYPE
- (2) PAINTING AND MARKINGS
- (3) FEATURES

B. DESCRIPTION

- (1) MATERIAL
- (2) ARRANGEMENT

C. REFERENCE MATERIAL

D. TOOLS/EQUIPMENT

E. PROTECTIVE EQUIPMENT

3. FUNCTIONING

4. DISASSEMBLY/INERTING PROCEDURES

**WARNINGS**

5. STORAGE/HANDLING AND DISPOSAL OF HAZARDOUS MATERIALS
  - A. STORAGE REQUIREMENTS
  - B. HANDLING REQUIREMENTS
  - C. DISPOSAL REQUIREMENTS
6. RANGE REPORTS/LIST OF PERSONNEL
7. SUPPLEMENTAL INFORMATION
8. REMARKS/PROBLEM AREAS
9. ADMINISTRATIVE ACTIONS REQUIRED
  - A. ITEM CHECKED FOR INERT STATUS CLARIFICATION?  
YES / NO BY:
  - B. ITEM TO BE ADDED TO TRAINING AIDS LIBRARY?  
YES / NO
  - C. INERTING STICKER NUMBER ASSIGNED/ATTACHED?  
YES / NO STICKER NUMBER:
  - D. ITEM ADDED TO THE EOD TRAINING AIDS LIBRARY  
TRACKING SYSTEM?  
YES / NO

ENCLOSURE (4)

EXPLOSIVE ORDNANCE DISPOSAL LESSON PLAN ON

DRAFTED BY:	_____	DATE:	_____
REVIEWED BY:	_____	DATE:	_____
APPROVED BY:	_____	DATE:	_____

REFERENCES :

EQUIPMENT LIST :

A. CLASSROOM

B. PRACTICAL APPLICATION (As Required)

C. SAFETY EQUIPMENT (Practical Application-As Required)

I. ATTENTION GAINER :

II. INTRODUCTION :

A. ENABLING LEARNING OBJECTIVE(S) :

B. TERMINAL LEARNING OBJECTIVE(S) :

III. BODY :

A.

TRANSITION

B.

TRANSITION

C.

TRANSITION

IV. CONCLUSION

V. QUESTIONS AND ANSWERS



- VI. PRACTICAL APPLICATION (AS REQUIRED)
  - A. STEP-BY-STEP PROCEDURES
  - B. DIAGRAM
  - C. HAZARDS, HAZARDS CONTROL, AND HAZARDS CONTROL BRIEFING
  - D. EMERGENCY RESPONSE AND CONTINGENCY PLANS
  - E. SECURITY OF CLASS V (W)

ENCLOSURE (5)